

SEQUENCE LISTING

<110> Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo

<120> Polypeptide

<130> W01006

<160> 47

<210> 1

<211> 13

<212> PRT

<213> Artificial Sequence

<223> Peptide fragment of PAc at the positions of 365 to 377

<400> 1

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

1

5

10

<210> 2

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 2

Arg Gly Asp

1

<210> 3

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 3

Arg Glu Asp

1

<210> 4

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 4

Leu Asp Val

1

<210> 5

<211> 5

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 5

Pro His Ser Arg Asn

1

5

<210> 6

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 6

Arg Lys Lys

1

<210> 7

<211> 4

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 7

Asp Gly Glu Ala

1

<210> 8

<211> 5

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 8

Tyr Ile Gly Ser Arg

1

5

<210> 9

<211> 5

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 9

Ile Lys Val Ala Val

1

5

<210> 10

<211> 8

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 10

Arg Phe Tyr Val Val Met Trp Lys

1

5

<210> 11

<211> 5

<212> PRT

<213> Artificial Sequence

<223> Integrin binding motif

<400> 11

Ile Arg Val Val Met

1

5

<210> 12

<211> 13

<212> PRT

<213> Artificial Sequence

<223> A mutated unit peptide

<400> 12

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Gln Thr Glu Leu

1

5

10

<210> 13

<211> 13

<212> PRT

<213> Artificial Sequence

<223> A mutated unit peptide

<400> 13

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Thr Asp Leu

1

5

10

<210> 14

<211> 13

<212> PRT

<213> Artificial Sequence

<223> A mutated unit peptide

<400> 14

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Thr Ala Leu

1

5

10

<210> 15

<211> 16

<212> PRT

<213> Artificial Sequence

<223> A mutated unit peptide

<400> 15

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu Lys Gln Tyr

1

5

10

15

<210> 16

<211> 14

<212> PRT

<213> Artificial Sequence

<223> A mutated unit peptide

<400> 16

Asn Glu Ala Asp Tyr Gln Ala Lys Leu Thr Ala Tyr Gln Thr

1

5

10

<210> 17

<211> 27

<212> PRT

<213> Artificial Sequence

<223> Unit peptide - PAc(305-318)

<400> 17

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu Asn Glu Ala

1

5

10

15

Asp Tyr Gln Ala Lys Leu Thr Ala Tyr Gln Thr

20

25

<210> 18

<211> 27

<212> PRT

<213> Artificial Sequence

<223> PAc(305-318) fragment - unit peptide

<400> 18

Asn Glu Ala Asp Tyr Gln Ala Lys Leu Thr Ala Tyr Gln Thr Thr Tyr

1

5

10

15

Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

20

25

<210> 19

<211> 20

<212> PRT

<213> Artificial Sequence

<223> OMP

<400> 19

Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val

1

5

10

15

Gln Lys Val Ala

20

<210> 20

<211> 35

<212> PRT

<213> Artificial Sequence

<223> OMP-KK-UP

<400> 20

Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val

1

5

10

15

Gln Lys Val Ala Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu

20 25 30
Ala Asp Leu
35

<210> 21

<211> 35

<212> PRT

<213> Artificial Sequence

<223> UP-KK-OMP

<400> 21

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu Lys Lys Leu
1 5 10 15

Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val Gln
20 25 30

Lys Val Ala

35

<210> 22

<211> 28

<212> PRT

<213> Artificial Sequence

<223> Di unit peptide (UP-KK-UP)

<400> 22

Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu Lys Lys Thr
1 5 10 15

Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu
20 25

<210> 23

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Cadherin binding motif

<400> 23

Asp Arg Glu

1

<210> 24

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Cadherin binding motif

<400> 24

Asp Glu Asp

1

<210> 25

<211> 3

<212> PRT

<213> Artificial Sequence

<223> Cadherin binding motif

<400> 25

His Ala Val

1

<210> 26

<211> 4

<212> PRT

<213> Artificial Sequence

<223> Cadherin binding motif

<400> 26

Arg Gly Asp Ser

1

<210> 27

<211> 31

<212> PRT

<213> Artificial Sequence

<223> RGD-di unit peptide (DUP)

<400> 27

Arg Gly Asp Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

1

5

10

15

Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

20

25

30

<210> 28

<211> 31

<212> PRT

<213> Artificial Sequence

<223> RED-di unit peptide (DUP)

<400> 28

Arg Glu Asp Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

1

5

10

15

Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

20

25

30

<210> 29

<211> 33

<212> PRT

<213> Artificial Sequence

<223> YIGSR-di unit peptide (DUP)

<400> 29

Tyr Ile Gly Ser Arg Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala

1

5

10

15

Asp Leu Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp

20

25

30

Leu

<210> 30

<211> 31

<212> PRT

<213> Artificial Sequence

<223> DED-di unit peptide (DUP)

<400> 30

Asp Glu Asp Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

1

5

10

15

Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

20

25

30

<210> 31

<211> 31

<212> PRT

<213> Artificial Sequence

<223> HAV-di unit peptide (DUP)

<400> 31

His Ala Val Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

1

5

10

15

Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

20

25

30

<210> 32

<211> 38

<212> PRT

<213> Artificial Sequence

<223> RGD-OMP-KK-UP

<400> 32

Arg Gly Asp Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu

1

5

10

15

Asp Arg Val Gln Lys Val Ala Lys Lys Thr Tyr Glu Ala Ala Leu Lys

20

25

30

Gln Tyr Glu Ala Asp Leu

35

<210> 33

<211> 38

<212> PRT

<213> Artificial Sequence

<223> OMP-RGD-KK-UP

<400> 33

Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val

1 5 10 15
 Gln Lys Val Ala Arg Gly Asp Lys Lys Thr Tyr Glu Ala Ala Leu Lys
 20 25 30
 Gln Tyr Glu Ala Asp Leu
 35

<210> 34

<211> 38

<212> PRT

<213> Artificial Sequence

<223> OMP-KK-RGD-UP

<400> 34

Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val
 1 5 10 15
 Gln Lys Val Ala Lys Lys Arg Gly Asp Thr Tyr Glu Ala Ala Leu Lys
 20 25 30
 Gln Tyr Glu Ala Asp Leu
 35

<210> 35

<211> 38

<212> PRT

<213> Artificial Sequence

<223> RGD-KK-UP-RGD

<400> 35

Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val
 1 5 10 15
 Gln Lys Val Ala Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu

20 25 30
Ala Asp Leu Arg Gly Asp

35

<210> 36

<211> 16

<212> PRT

<213> Artificial Sequence

<223> T1 peptide derived from HIV IIIB gp120

<400> 36

Lys Gln Ile Ile Asn Met Trp Gln Ala Val Gly Lys Ala Met Tyr Ala

1

5

10

15

<210> 37

<211> 14

<212> PRT

<213> Artificial Sequence

<223> OVAp derived from ovalbumin

<400> 37

Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn Glu

1

5

10

<210> 38

<211> 39

<212> PRT

<213> Artificial Sequence

<223> RGD-OMP-KK-UP

<400> 38

Arg Gly Asp Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu

1

5

10

15

Asp Arg Val Gln Lys Val Ala Lys Lys Ile Ser Gln Ala Val His Ala

20

25

30

Ala His Ala Glu Ile Asn Glu

35

<210> 39

<211> 34

<212> PRT

<213> Artificial Sequence

<223> T1-RGD-KK-UP

<400> 39

Lys Gln Ile Ile Asn Met Trp Gln Ala Val Gly Lys Ala Met Tyr Ala

1

5

10

15

Arg Gly Asp Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala

20

25

30

Asp Leu

<210> 40

<211> 36

<212> PRT

<213> Artificial Sequence

<223> OMP-KK-OVAp

<400> 40

Leu Ala Val Tyr Trp Glu Leu Leu Ala Lys Tyr Leu Leu Asp Arg Val

1

5

10

15

Gln Lys Val Ala Lys Lys Ile Ser Gln Ala Val His Ala Ala His Ala

20 25 30
 Glu Ile Asn Glu
 35

<210> 41

<211> 31

<212> PRT

<213> Artificial Sequence

<223> T1-KK-UP

<400> 41

Lys Gln Ile Ile Asn Met Trp Gln Ala Val Gly Lys Ala Met Tyr Ala

1 5 10 15

Lys Lys Thr Tyr Glu Ala Ala Leu Lys Gln Tyr Glu Ala Asp Leu

20 25 30

<210> 42

<211> 15

<212> PRT

<213> Artificial Sequence

<223> gag protein at the position of 298-312

<400> 42

Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr

1 5 10 15

<210> 43

<211> 15

<212> PRT

<213> Artificial Sequence

<223> pol protein at the position of 596-610

<400> 43

Trp Glu Phe Val Asn Thr Pro Pro Leu Val Lys Leu Trp Tyr Gln

1

5

10

15

<210> 44

<211> 16

<212> PRT

<213> Artificial Sequence

<223> V3 loop peptide of gp120 protein from HIV

<400> 44

Lys Arg Lys Arg Ile His Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys

1

5

10

15

<210> 45

<211> 18

<212> PRT

<213> Artificial Sequence

<223> HA (hemaggrutinin) protein at the position of 91-108 from influenza virus

<400> 45

Ser Lys Ala Phe Ser Asn Cys Tyr Pro Tyr Asp Val Pro Asp Tyr Ala

1

5

10

15

Ser Leu

<210> 46

<211> 13

<212> PRT

<213> Artificial Sequence

<223> L2 protein from human papilloma

<400> 46

Leu Val Glu Glu Thr Ser Phe Ile Asp Ala Gly Ala Pro

1

5

10

<210> 47

<211> 16

<212> PRT

<213> Artificial Sequence

<223> A polypeptide for treating Japanese cedar pollinosis

<400> 47

Val His Pro Gln Asp Gly Asp Ala Lys Lys Trp Val Asn Gly Arg Glu

1

5

10

15